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University of the State of New York Bulletin

Entered as second-class matter August 2, 1913, at the Post Office at Albany, N. Y.,
under the act of August 24, 1912

Published fortnightly

No. 693

ALBANY, N. Y.

September 1, 1919

Immigrant Education

AMERICANIZATION IN INDUSTRY

BY

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Supervisor of Factory Classes



Night men in a large factory study English after work

ALBANY

THE UNIVERSITY OF THE STATE OF NEW YORK

1919

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AMERICANIZATION IN INDUSTRY

"Advancement—improvement in condition—is the order of things in a society of equals." *Abraham Lincoln, July 1, 1854*

From the beginning of colonial history, general education has been a chief concern of the American people. We have proudly considered our public school system the foundation of democracy and have been overweeningly confident of its power to fuse all opposing elements in our population. The disillusioning reports during the war shocked our complacency and indicated that the percentage of illiteracy given in the United States census of 1910, when tested practically, was altogether too low. According to data accumulated by the War Department, 25 per cent of the selected young men of our Nation, called together by the draft, were unable to read newspapers or write letters home. "A large proportion of this 25 per cent were as completely incapable of writing their names as the coolies of inland China."¹ This deficiency, a tremendous disadvantage to these men as individuals in times of peace, became, in the mass, in stress of war, a formidable obstacle to their efficiency as soldiers and as members of the industrial forces. In a great crisis an unfair burden was put on them and their officers to overcome this handicap.

During March 1918, Secretary of the Interior Lane said, in letters to President Wilson and to the congressional chairmen of the committee on education: "I believe that the time has come when we should give serious consideration to the education of those in the United States who can not read or write. The war has brought facts to our attention that are almost unbelievable and that in themselves are accusatory. . . . An uninformed democracy is not a democracy."²

Commissioner Finley, said before the New York Legislature, after he had visited a cantonment: "What a commentary upon our educational shortcomings that in the days of peace we had not taught these men, who have been here long enough to be citizens (and tens of thousands of their brothers with them) to know the language in which our history and laws are written and in which the commands of defense must now be given!"

¹ The New Nationalism and Education, by Robert W. Bruere. Harpers Magazine, July 1919.

² Letter quoted in the Official Bulletin, March 16, 1918.

Legislation in New York

To meet the need of the great number of illiterates in our state and of the non-English-speaking, both literate and illiterate, and to prepare them for citizenship¹ amendments to the education law were made, which took effect September 1, 1918. These amendments are:

1 To require night schools throughout the state.

2 To require attendance at some day or evening school or some school maintained by an employer of every minor between sixteen and twenty-one years of age "who does not possess such ability to speak, read and write the English language, as is required for the completion of the fifth grade of the public or private schools of the city or school district in which he resides. . . . Any employer may meet the requirements of this act by conducting a class or classes for teaching English and civics to foreign-born in shop, store, plant or factory under the supervision of the local school authorities."

3 To authorize the Commissioner of Education to divide the State into zones and to appoint such persons as would be necessary "to promote and extend educational facilities for the education of illiterates and of non-English speaking persons."²

Night Schools

Most of the illiterates and non-English-speaking are above legal school age. Indeed, the large majority are over twenty-one. Night schools have never reached more than a negligible number of these who most need instruction. It is only the younger and the ambitious who enrol for an evening course, and many of these soon drop out. There are many reasons for this failure to meet a great educational need, one of the chief being that men and women, tired from a hard day's work, have not the physical strength to exert themselves for exacting mental effort. To hurry through supper, change one's clothes, and rush out again, to reach a school a long way off, seems too much of a burden. After an all day's absence, they are loath to leave their families. Indeed, most of them have not the slightest desire for book-learning, for they have come from countries where, for the masses, there is no tradition of education.

¹ According to Census of 1910, illiterates numbered 406,020, and non-English-speaking, 597,012; aliens by state census of 1915 equaled 1,628,229.

² Public Facilities for Educating the Aliens, F. E. Farrington. Bureau of Education Bul. 18 (1916), p. 33-35.

Miss Sarah Elkus, who with the board of education of New York City for four years has been organizing classes in settlements, stores and factories, says:

"In considering this great problem, the query naturally is made: Why are not the evening schools sufficient to educate the foreign-born? There are several answers to this question. First of all, the worker is tired when the day's toil is over and he or she prefers amusement to instruction. Second, the foreigner who speaks no English finds the evening school uncongenial because he is at a decided disadvantage when surrounded by more advanced pupils who may thoughtlessly laugh at his mistakes.

"When I asked one man why he did not go to evening school, he said he did not like to put his boots on after he had taken them off. We have found that the only successful way to get results with non-English-speaking foreigners is to have classes in the factories where they are employed. When given an opportunity to attend the factory classes, many workingmen and women gladly devote an hour to study, after work is over, and some of the pupils make remarkable progress in a very short time."

Night schools have been too little advertised, too meagerly financed and too inadequately planned and equipped to meet the needs of adults. They have never been given the same thoughtful care as day schools. A comparison of the figures given herewith, representing the non-English-speaking and illiterate foreign-born whites in New York State and their school attendance, does not lead to complacency.

Foreign-born whites in New York State¹

Total number	2 729 272
Non-English-speaking	597 012
Illiterates	406 020

School attendance of foreign-born whites in New York State

Total number attending school	10 years of age and over	15 years of age and over	21 years of age and over
187 034	131 541	43 492	9 603

Classes in Work Places

Since the necessity for increased facilities of education is obvious, and since night schools will inevitably reach only a small portion of those most in need of instruction, classes in work places are an essential to democracy. We must make learning accessible. This idea of taking school into industry is not new. Apprentice

¹ Census of 1910.

and corporation schools, vestibule, corridor and cooperative classes, have been widely tested. Teaching of English and civics to groups in factories is a commonplace in many cities.

These classes in English and civics will not be the cure of all troubles in a factory, but if they are intelligently and whole-heartedly conducted, they do much in bettering conditions. In advocating this instruction, the State is primarily interested in the individuals who otherwise would remain illiterate and unable to speak English. Both employers and employees, however, before giving their cooperation must be persuaded that such teaching will be advantageous to them. It is difficult to separate the specific benefits which come to the different partners in the enterprise, but what the experience in various places has been is shown by this summary:

Advantages of Factory Classes to Employers

- 1 Reduction of accidents to workers and machines
 - a Fewer compensation cases
 - b Lower insurance rate
- 2 Lessened labor turnover
- 3 Increased production and better quality of work
- 4 Better cooperation between employed and employers
- 5 Greater harmony among employees
- 6 More interest in the care and cleanliness of factory
- 7 Less supervision

The worker should be made to realize that knowledge of English is primarily for his own protection. English is the language of the country and whoever is ignorant of it is at a disadvantage with fellow workmen who know it. Both inside and outside the shop he is often the victim of the unscrupulous who exploit his helplessness.

Advantages of Factory Classes to Workers

- 1 In general
 - a Less risk of accidents
 - b Greater chance to advance in wages and job
 - c Greater self-protection from unfair deals
 - d More intelligent workmanship
 - e Opportunity to enter more fully into the life of the factory and community
 - f More adequate preparation for citizenship

2 From instruction in civics and hygiene

- a Understanding of functions of different departments of city, state and national governments
- b Knowledge of school and health laws of community
- c Familiarity with educational and recreational facilities of the community

The community receives benefit, for whenever even one person demands better things, standards are raised.

Advantages of Factory Classes to the Community

- 1 More enlightened neighborhoods that demand better housing, sanitation etc.
- 2 Greater intelligence in caring for the sick
- 3 Demand for entertainment of higher grade
- 4 Greater number desiring citizenship
- 5 More united community

Accidents as a Result of Ignorance of English

The most important part of factory management has to do with reducing accident rates. There is overwhelming testimony that ignorance of English is vitally concerned with this. It is impossible to give many carefully worked out investigations, for only in a few places have they been made. Nor is it wise to draw hard and fast conclusions as to the exact relation of this handicap to disaster, for the non-English-speaking foreigners are likely to be inexperienced laborers, and accident rates are admittedly highest among workers new at a job. It is the part of common sense however, to acknowledge that the inability to understand directions increases risk in hazardous occupations. A careful study of the safety movement in the iron and steel industry from 1907 to 1917, made for the United States Department of Labor by Lucian W. Chaney and Hugh S. Hanna, supports this assumption. The period studied "embraces practically the entire history of the safety movement, not only in the manufacture of iron and steel but in the whole field of American industry. At that time, indeed, (say 1907 and the years immediately preceding) there existed in American industry generally a frightful disregard of human life. Accident occurrence had reached a condition perhaps not paralleled at any other time or place. Two factors contributed to such a condition: first an unprecedented degree of business activity; and second, a

larger proportion of inexperienced immigrant labor than at any time before or since."¹

¹ The Safety Movement in the Iron and Steel Industry. Bureau of Labor statistics, Bul. 234, p. 13.

Of all inexperienced workers, the man most handicapped would seem to be the one who is not only without knowledge of his task but is unable to communicate freely with those who direct him. When one large company began to study carefully their working conditions, they found it not infrequently the case that a foreman was in charge of a gang with no member of which could he communicate either directly or by an interpreter. Still more common was it to find individual men who were thus barred from communication with their immediate superior. This was at once recognized as a dangerous condition and the rule was issued that gangs should be formed in such a manner that each man should be able to communicate with his foreman directly or by interpreter.²

² Op. cit., p. 144.

The following table (summary) contrasts accident rates of (1) American-born workers, (2) English-speaking, foreign-born workers, and (3) non-English-speaking foreign-born workers, over a period of eight years, 1906 to 1913, in the only plant for which full data could be obtained:

GROUP	Number of 300-day workers	ACCIDENT FREQUENCY RATES (per 1000 300-day workers)				ACCIDENT SEVERITY RATES (days lost per 300-day worker)			
		Death	Perma- nent disability	Tempo- rary disability	Total	Death	Perma- nent disability	Tempo- rary disability	Total
TOTAL OF 8 YEARS									
American born.....	12 587	2.1	2.8	85.8	90.7	18.6	1.7	1.5	21.8
English-speaking foreign-born	18 746	2.3	3.9	92.5	98.7	21.1	3.3	2.0	26.4
Non-English-speaking foreign- born.....	22 910	2.6	6.5	203.5	212.6	23.2	3.5	2.8	29.5
Total.....	54 243	2.4	4.8	137.8	145.0	21.4	3.2	2.6	27.2

Examining the combined data for the eight years, it will be noted that the non-English speakers have a frequency rate 2.3 times that of the American born (212.6 as against 90.7 cases per 1000 300-day workers) and a severity rate 1.4 times as high as that of the American-born (29.5 against 21.8 days lost per worker).¹

In another study of accidents in machine building, the same general conclusions are reached:

It was not possible in the plants covered to separate the employees into English and non-English speakers. For one large machine-building plant, however, separation was possible between the American-born and foreign-born. The foreign-born showed an accident rate approximately double that for the native-born. This excess rate among foreign-born is clearly attributable to the same causes which lead to a constant excess among non-English-speaking steel workers partly to their failure to understand clearly the orders given them, and partly to the fact that the recent immigrant suffers from lack of experience, and thus falls largely into the group of unskilled occupations involving exposure to inherently high accident hazards.²

Although few accurate studies of the relation of the inability to speak and understand English to accidents have been made, many opinions are expressed by careful writers. In "The Case Against Night Work," by Josephine Goldmark and Louis Brandeis, the statement is made: "Ignorance of the English language is the greatest obstacle to industrial advancement. It prevents the distribution of congested immigrant populations and increases injuries and occupational diseases, owing to the immigrants' inability to understand orders or hygienic regulations printed or orally given in industrial establishments."

The Commonwealth Steel Company of St Louis reports that 80 per cent of the injuries received by their workmen are among the non-English-speaking employees "though they constitute only 34 per cent of the force."

Miss Eastman, in her study of accidents in coal mines, "Work Accidents and The Law" (The Pittsburgh Survey, 1910) says: "Ignorance covers a large share of these cases, the ignorance of young boys, of those who are 'green' at their job, of the tongue-tied alien who finds himself for the first time a part of swift and mighty processes."

¹ Op. cit., p. 144-46.

² Accidents and Accident Prevention in Machine Building. United States Bureau of Labor statistics Bul. 216, p. 12.

Van H. Manning, director of the United States Bureau of Mines, makes a strong plea for the education of these inarticulate workers:

In the Pennsylvania anthracite mines 43 per cent of the employees are English-speaking and this number is charged with only 28.8 per cent of the fatalities, whereas the other 56 per cent (representatives of continental Europe) sustained 71 per cent of the fatalities. Likewise in the Pennsylvania bituminous mines the English-speaking employees represent 35 per cent of the total and are charged with 27 per cent of the fatalities, whereas the other 65 per cent (representatives of continental Europe) are charged with 73 per cent of the fatalities. As regards the figures for West Virginia, the English-speaking employees represent 67 per cent and notwithstanding the fact that this includes 17 per cent of colored employees, only 53 per cent of the fatalities are charged to the English-speaking employees, whereas, the other 33 per cent sustain 47 per cent of the fatalities. Almost the same ratio holds for nonfatal injuries in the three groups of mines cited.

Had the fatality and injury rate for the English-speaking American been maintained throughout the three groups, there would have been a saving of 716 fatalities, and 900 very serious injuries, a strong argument for Americanization and education of the miner.¹

Extent of Industrial Accidents in the United States

The cost of industrial accidents is appalling; a tremendous drain on the vitality and wealth of our Nation. "The probable approximate number of fatal industrial accidents among American wage-earners, including both sexes, may be conservatively estimated at 25,000 for the year 1913, and the number of injuries involving a disability of more than four weeks, at approximately 700,000."² In the face of the testimony that ignorance of English is a factor in this terrible waste, how can we dare to leave a stone unturned in giving workers at least an elementary vocabulary?

Industrial Accidents and Compensation, New York State

The following statement was furnished by the State Department of Labor:

As to the number of industrial accidents occurring in New York State, according to the latest report of the Bureau of Workmen's Compensation, there were in the year ending June 30, 1918, in round numbers, 287,000 accidents in the State of which 53,000 were compensated under our New York State law. A rough estimate, which is all that is possible with the present available data, indicates that the cost of these accidents for compensation, medical benefits, administration of the compensation law, administration of the compensation insurance, and the wage and medical losses

¹ Monthly Statement of Coal-mine fatalities in United States Jan. 1919. p. 11. Dept. of Interior.

² Industrial Accident Statistics No. 157. U. S. Dept. of Labor, Bureau of Labor Statistics, p. 6. F. L. Hoffman.

of injured employees, not covered by compensation was in round numbers, \$30,000,000. A rough estimate of the loss of production occasioned by these accidents, indicates that it was in round numbers \$100,000,000.

"As to what proportion of these accidents could be charged to the inability of employees to understand English, there are no data dependable enough or comprehensive enough to enable one to make an estimate. There is entirely dependable evidence, however, that that element was an important factor in the causation of these accidents. Some of the best evidence of that kind is to be found in recent bulletins concerning industrial accidents of the Federal Bureau of Labor Statistics, Washington, D. C."

An Estimate of Numbers of Non-English Speaking Workmen Who are Hurt in the Compensation Jurisdiction

William C. Archer, Deputy Commissioner, Bureau of Compensation, New York State Department of Labor, makes the following statement:

If I were asked to make an estimate, I think I should say that four out of ten workmen who are hurt in the compensation jurisdiction, can not speak English. If I were speaking of New York City alone, I would put it at about one-half.

The Relation of Illiterates to Economic Loss

Aside from the acknowledged relation of ignorance of English to accident rates, there is an important connection between ignorance of English and illiteracy to economic loss. Secretary of the Interior Lane, in a letter to President Wilson, says:

I beg you to consider the economic loss arising out of this condition [of illiteracy]. If the production labor value of an illiterate is less only 50 cents a day than that of an educated man or woman, the country is losing \$825,000,000 a year through illiteracy. This estimate is no doubt under rather than over the real loss. The federal government and the states spend millions of dollars in trying to give information to the people in rural districts about farming and homemaking. Yet 3,700,000 or 10 per cent of our country folk can not read or write a word.¹

Labor Turnover in Relation to Ignorance of English and to Illiteracy

Ignorance of English is a large factor in turnover. It is generally acknowledged that the non-English-speaking and illiterate workmen are the ones most easily discouraged and ready to give up the job. Misunderstandings and suspicion arise among foremen and men through inability to speak a common language. It is only recently that employers have realized the enormous expense

¹ Letter quoted in the Official Bulletin, March 16, 1918.

entailed in continual replacement of their forces. The first published record of an investigation on a large scale is from a paper by Magnus W. Alexander, head of the training schools of the General Electric company. In 1912 he made a study of twelve American factories varying in size from 300 to over 10,000 employees. He discovered that 72.8 per cent of all employees engaged during 1912 were entirely new to the factories and that most of the employers utterly failed to realize the appalling waste in continually replacing workers. The group of firms which he studied and which he considered typical "engaged about six and one-third times as many persons during the year as were necessary to account for the permanent increase in the total working force."

According to Mr Alexander's conclusions, at least 22,031 of these changes were unnecessary. By summing up the expenses incurred in training each group, Mr Alexander finds a total of \$831,030 or an average cost of over \$37 for each of the 22,031 persons apparently unnecessarily engaged.

The items considered in computing cost were (1) hiring, (2) instruction, (3) wear and tear on machinery, (4) reduced production, (5) spoiled work. "This amount will be considerably greater and may reach a million dollars if the decrease of profits due to reduced production and the increase of expenses on account of an enlarged equipment investment are taken into consideration.¹

"While one manager estimated the cost of hiring and breaking in an employee at \$30 the estimate of all others ranged from \$50 to \$200 per employee. The great difference in these estimates is no doubt due to the diversity of the industries represented by these managers. Most estimates ranged between \$50 and \$100."²

Mr Alexander's study was more concerned with skilled labor, men who were likely to be English-speaking and literate, and he was primarily interested in the cost of the turnover rather than in its causes. The expense of breaking in men for common labor is of course less than training them for complicated machines. Since Mr Alexander's investigation, others have been made with varying estimates of the cost of different items. Many consider the total cost more than Mr Alexander reckoned. Even yet there are many employers who take excellent care of their machinery and equipment, who have not learned the necessity of making a

¹ The Annals of the American Academy, May, 1916, p. 138-40.

² R. W. Kelly. Hiring the Worker, p. 198-99.

scientific study of the human element in their plants. They do not realize the paramount importance of adapting environment to workers. Men and women naturally shun a place where hazards are reported high, or where conditions are unpleasant. In general, whatever makes men and women feel that they are becoming more efficient, or whatever contributes to more complete adaptation to their surroundings, will reduce the desire of change. Where factory classes have been in operation even for a short time and on a small scale, there is testimony that they have been a stabilizing factor. In them men and women are dealt with as individuals, and they become conscious of relationships and responsibilities which before they have not felt.

Labor and Education

One of the healthful signs of the current discussion of "reconstruction," during and since the war, is the realization among increasing numbers that education has been essentially aristocratic, for the selected few and not for the mass. Organized workers are demanding that the men and women who fill our shops and factories must not for that reason be denied education. They are apprehensive of purely technical schools which train for specialized industry and not for life. The publications of the British Workers' Educational Association are illuminating. "The really great thing is that liberal education (in opposition to specialized education for undeveloped minds) should be open to all who can profit by it."¹ The platform of the Labor party of Greater New York likewise calls for general, liberal training as a prerequisite to specialization. The educational program of the State Federation of Labor is broad and progressive.

Factory classes are only a breaking of the ground, but intelligently conducted, they atone in a slight measure for past deficiencies and prepare the way for wider training. In immediate results, they contribute to three great essentials in human relationships: sympathy, loyalty and creative impulse. With the growth of huge establishments, the direct relation between employer and man has gone. Unskilled laborers in a factory are far removed from supervision and acquaintance of the general manager, himself often an employee of some one more powerful. During the war when full production was a grim necessity, this weakness in

¹ "What Is Democratic Education?" See, too, "Labor and the Commonwealth," G. D. H. Cole.

our industrial system was recognized and we had immense mass meetings of workmen addressed by employers, who were internationally important. The effect on production of this rather artificial contact was magical. Each man, in whatever humble capacity, was made to feel that he personally had a responsibility in the nation's crisis and that he had a loyalty to show to his employer and country.

These groups of men and women, gathered for study in classes, have in a degree, the old-time personal contact, for they are dealt with as individuals and not as part of a machine. The teacher is interested in their history, their country, and their family. The foremen inquire about their progress. This little leaven goes a long way in transforming the spirit of a large group.

Many thoughtful writers are discussing the creative impulse in industry and its relation to present industrial questions. Some wise employers are realizing that they can not get intelligent whole-hearted cooperation until their employees have a more thorough knowledge of the industry than they can get by monotonous repetition of one operation. For employees handicapped by ignorance of English, such knowledge is very difficult. Robert Wolf, at a meeting of the Taylor Society in March 1917, said:

The opportunity for self-expression, which is synonymous with joy in work, is something that the workman is entitled to, and we employers who feel that management is to become a true science must begin to think less of the science of material things and think more of the science of human relationship. Our industries must become humanized, otherwise there will be no relief from the present state of unrest in the industries of the world.

. . . It is beginning to be understood that when we deny to vast numbers of individuals the opportunity to do creative work, we are violating a great universal law.¹

In the appendix is a list of cities where in one or more factories these classes for the non-English-speaking and illiterate are held. This educational experiment is not confined to one locality but is being tried throughout the country. Lists of firms in different cities are given in the appendix. The opinions of employers and organizations of the value of this work also are interesting and instructive. These are also found in the appendix.

Organization of Factory Classes

Education of adults as of children is rightly the responsibility of the community. In the organization of factory classes, public

¹ Bulletin of the Taylor Society, March 1917.

school officials and teachers in cooperation with plant officials should plan and direct the work. Other civic and educational associations well may be asked to cooperate. Three things are necessary to the success of this undertaking: (1) sympathy and active help of employers; (2) skilled teachers especially qualified for a task requiring energy, resourcefulness, tact and efficiency; (3) interest and determined effort of the men and women who need the instruction. To gain the confidence of the workers and knowledge of their needs, leaders of different national groups ought to be asked to serve on committees.

Census of the Plant

A director of educational work should be appointed. Foremen then are called together by the manager and plans carefully explained by the director. In some places, mass meetings of the employees are addressed, through interpreters, by manager and foremen; in others, smaller groups are reached more effectively. A simple explanation of proposed classes is made carefully and emphasis laid on the point that English is necessary for the workers' protection and advancement. Their own countries, languages and cultural contributions ought to be given generous recognition and no suggestion made of a compulsory substitution of English for their native tongue. The advantages of proficiency in two languages might well be stressed.

After preliminary explanations, each employee or some one acting for him ought to fill out cards supplied by the State Department of Education giving (1) name, address, age, country of birth; (2) length of time in this country; (3) citizen or alien; (4) first papers, time since taking them; (5) amount of schooling in native country and in America; (6) ability to speak, read and write English; (7) married or single; (8) members of immediate family; (9) school attended by children; (10) length of time in the employ of firm; (11) job; (12) check number; (13) foreman; (14) hours of work; (15) desire to attend night school; (16) desire to attend factory classes.

According to information obtained in the registration, classes of different grades may be formed.

Composition of Classes

Whether employees in classes shall be separated according to nationality, age, sex, literacy, knowledge of English, etc., are matters to be decided from varying conditions in different factories.

Generally speaking, in beginners' classes the best work is obtained from careful grading, based on age, nationality, literacy and understanding of English. Simple tests for grading may be obtained by sending to the State Department of Immigrant Education.

Teachers

Teachers for this work ought to be the best of the community and sufficient salaries paid to induce trained men and women to take up this highly skilled teaching. Only in exceptional instances is it advisable to have foremen or other plant employees give instruction, and then they should have an intensive course in methods. A man may be a good mechanic, a competent foreman, employment manager, or welfare worker, and still be unfitted for teaching. Public school teachers should have intensive training from some shop executive in shop vocabulary, safety directions, and history of the industry. It is easier for persons trained in pedagogy to acquire in a short time this knowledge than for shop employees to master the technic of teaching.

Financial Support of Classes

Money for factory classes should be included in the public school budget. An educational campaign may be necessary to impress upon the citizens their responsibility to illiterates and non-English-speaking adults. Experience has proved that night schools have not adequately met the emergency.

The State Federation of Labor, through its committee on education, has taken a strong stand on education and through local unions has pledged to demand public support for these continuation classes. Section 23 of its report of 1918 reads: "Acquisition of a fair knowledge of the American language by continuous shop and school instruction, supervised by state educational authorities, to be required of all employed foreign-language aliens as a condition of continued employment."

Time for Classes

Some employers, realizing that additional efficiency gained by the workers from class instruction is an asset in their business, gladly give the time for factory classes. Others give half, and the employees, half. In other plants, particularly, where there is an eight hour day, the time is entirely outside working hours. The period, forty-five minutes or thereabouts, is sometimes at the end

of the day or shift, sometimes in the early forenoon, or afternoon. The number of meetings a week varies in different places. Excellent results have been obtained from three a week.

Place of Meeting

Rest rooms, restaurants, recreation halls, and similar rooms are used as classrooms. If preferred, schoolhouses or libraries in the vicinity may be used. Chairs, tables, blackboards and good lighting are necessary equipment. Notebooks, pencils and textbooks entail little expense and may be provided by employees or by the public schools.

Subjects of Instruction

In the foregoing pages, the teaching of English has been stressed and it is necessarily the chief subject of instruction. That, however, is the medium of teaching other things, after once a fundamental vocabulary has been gained, as safety in shop and street, hygiene in home and factory, history of industry, citizenship etc.

Needs of individual factories must be studied and instruction adapted to each industry and body of workers. Closest cooperation with the safety engineer of the plant is necessary, or in a small factory with foremen who train the workers. As it is admitted that ignorance of English is certainly a factor in accidents, resulting in loss of life or disability, our first duty is to instruct efficiently in safety directions. Later, general information of the industry can be given. Whatever, in short, is of immediate use to the groups of workers in each factory should guide in choice of subjects.

Above all, it is desired that the work done in these classes — necessarily elementary and meager — will develop a “quickenings of mental life” and that this instruction will be but the introduction to further study. No opportunity on the part of the teacher should be lost in using the groups to promote social life in plant and in community. A connection with the home can be formed and participation of the family in outside activities stimulated.

Regular class work may be varied by stereopticons, victrolas, pictures, dramatization, simple talks from people representing different interests of the pupils.

Certificate of Attendance

In some cities, certificates issued by the State are given to graduates of each grade of factory classes. Some such tangible

evidence of instruction is to be commended. This teaching of adults must be made dignified and matter of fact. The idea that training is only for children is a hindrance to progress. These men and women should be made to feel that school attendance is natural and every means possible ought to be taken in the factory and the community to give dignity and approbation to the work.

Cooperation

Through the war, we have learned that herculean tasks can be done if there is whole-hearted cooperation. In this great work set before us of making life fuller and better for our adult population whose childhood, often, through no fault of their own, lacked opportunities for any formal mental training, cooperation is an essential.

We must be free from suspicion of trying to force instruction on unwilling men and women. To this end, plans should be patiently explained through leaders of different groups. It is advisable to work with educational committees of labor unions, wherever they exist. Always there must be flexibility to adapt this work to the wishes and needs of each community and each group. A recognition of the value of old-world contributions is absolutely necessary to the full success of the undertaking.

APPENDIX

Composition of the Population of the United States in 1910

The figures in the 1910 census are now old but they give proportions which doubtless, in general, hold true.

Total population	91 922 266
Total foreign-born	13 515 886
Total foreign-born and mixed parentage.....	32 480 839

Of these foreign-born, almost three millions, or one in every four, could not speak English

Illiterates in population of United States, ten years of age and more, according to the census of 1910:

<i>Number</i>	<i>Per cent</i>
5 516 163.....	7.7

Statistics for New York State—1910 Census

Total population of New York State..... 9 113 614

More than 2,700,000 persons, or nearly 30 per cent of this number, were foreign-born whites. More than 3,000,000 persons, about 33 per cent, were of mixed parentage.

Illiterates in New York State

Total number of illiterates 10 years of age and over:

		<i>Percentage</i>
All classes	406 020.....	5.5
Native white of native parentage.....	21 292.....	0.8
Native white of foreign or mixed parentage....	15 026.....	0.7
Foreign-born white	362 025.....	13.7
Negro	5 768.....	5.0

Illiterates of New York State in Age Groups

<i>10 to 14 years</i>		<i>15 to 24 years</i>		<i>25 to 34 years</i>		<i>35 to 44 years</i>	
No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
2 619	.03	78 845	4.4	109 836	6.7	85 578	6.4
<i>45 to 54 years</i>							
		No.		Per cent			
		60 305		6.5			

Cities in Which Factory Classes are Already Organized

New York, N. Y.	Milwaukee, Wis.	Seymour, Conn.
Cleveland, Ohio	Detroit, Mich.	Chester, Pa.
Chicago, Ill.	Massena, N. Y.	Elmira, N. Y.
Philadelphia, Pa.	Deferiet, N. Y.	Los Angeles, Cal.
Boston, Mass.	New Brunswick, N. J.	New Britain, Conn.
Albany, N. Y.	Akron, Ohio	Southbridge, Mass.
Rochester, N. Y.	Niagara Falls, N. Y.	Kalamazoo, Mich.
Buffalo, N. Y.	Waterbury, Conn.	Worcester, Mass.
Middletown, Ohio	Youngstown, Ohio	New Bedford, Mass.
Cincinnati, Ohio	Bridgeport, Conn.	Cambridge, Mass.
Lynn, Mass.	Bayonne, N. J.	Terre Haute, Ind.
St Louis, Mo.	Lowell, Mass.	West Orange, N. J.
St Paul, Minn.	Pittsburgh, Pa.	

Firms Having Factory Classes in 1919

New York City

Franklin Simon Co.	Sweets Co. of America
General Cigar Co.	American Can Co.
American Tobacco Co.	Atlantic Comb Works
A. Goodman & Sons	Kaufman & Bonday
National Biscuit Co.	Cohen, Goldman & Co.
Frank Spica Co.	L. Greenfield's Sons
L. P. Hollander	Winter & Co.
Henri Bendel, Inc.	Altro Mfg. Co.
Hickson, Inc.	Wm. DeMuth & Co.

Niagara Falls, N. Y.

Carborundum Co.	National Carbon Co.
Acheson Graphite Co.	Niagara Electric Chemical Co.
Union Carbide Co.	U. S. Light & Heat Co.

Buffalo, N. Y.

Contact Process Co.
Dold Packing Co.
General Chemical Co.

Aluminum Castings Co.
Lumen Bearings Co.

Rochester, N. Y.

Bausch & Lomb Co.
Michael Stern & Co.

Wollensak Optical Co.

Syracuse, N. Y.

S. Shapiro Co.
A. E. Nettleton Co.
Crouse-Hinds
Warner Macaroni Co.
Stearns Factories
Smith-Premier Typewriter Co.

Solvay-Process Co.
Church & Dwight Co.
Pierce, Butler & Pierce
Brown-Lipe-Chapin
Onondaga Pottery Co.

Opinions of Employers and Organizations on the Value of Factory Classes

In a letter to the National Americanization Committee, Charles M. Schwab said:

It has been found repeatedly that Americanization of workers has a stabilizing effect. It shows quick results in the reduction of labor turnover and tends to create a spirit of cooperation among the workmen which is impossible when they do not speak the same language.

The board of directors of the Merchants' Association of New York City, said in a recent report:

We recommend strongly the institution of classes for manual workers and especially for illiterates, in places of employment during daylight hours, preferably with the cooperation of the public school authorities, and without loss of pay during the brief daily periods of instruction.

Mark A. Daly, general secretary of the Associated Manufacturers and Merchants of New York State, wrote to the State Department of Education, in November 1917:

The efficiency and safety of foreigners who do not speak English and who are employed in American industry has been seriously jeopardized by the fact that they have not a sufficient knowledge of the English language to comprehend ordinary "shop English."

Miss Sarah Elkus, in charge of factory classes in New York City, says:

As the classes progress, many employers are most enthusiastic in their approval of this innovation in factory life. They find the men become much more loyal to their country and to the company, and more efficient

in their work when they have learned to read such signs as "Open at this end," "Do not tear," "Be careful to cut with scissors." A large amount of money is saved in this way, and increased pay and promotion have been given to those who learned the language.

The D. E. Sicher Company of New York City, manufacturers of women's underwear, says:

It is worth while and most emphatically so [to have factory classes for foreign born]. Putting it on basis of expense, I could prove to you that it is worth while. They give back in efficient labor all that it costs to instruct them, part of each working day. We do not want cheap, illiterate, irresponsible, unambitious labor, and all progressive manufacturers are coming to see that such labor does not pay.

The General Chemical Company of Bayonne, N. J., has said:

The results have been excellent and have made it possible to promote many of the foreign-speaking employees to more important and better paying positions.

Michael Stern and Company of Rochester, wrote in July 1919:

There has unquestionably been an increase in efficiency among those who have taken advantage of the opportunity offered. The institution [factory classes] is one in which we are very much interested and which has our entire approval. We hope to resume classes next season and to interest even larger number of employees if there is a possibility of so doing.

The Bausch and Lomb Optical Company of Rochester, wrote in August 1919:

Our factory classes were established primarily to make it possible for those illiterate minors who live some distance from our factory and from an evening school to attend school, and therefore to comply with the law. We estimated that we might have 20 or 25 in the class; however, a careful investigation disclosed that we have but 14 illiterate minors who found it impossible to attend one of the evening schools. Nevertheless, on January 27th, we started our first factory class with 14 illiterate minors and two other alien adults who wanted to become Americans.

Shortly after the classes opened for minors, we found a strong demand for classes in English on the part of adult males who had not been attending evening school because it was too much of a hardship for them to get out in the evening and because of their reticence in attending regular school classes. It was therefore decided to open our factory classes to alien adults in the factory. We had as a result over 100 applications of men who desired to take up the work.

The school had six classes, five of the lower grade and one of the more advanced grade. These six classes were taught by four teachers furnished by the board of education. The school was in session from 5.15 to 7 oclock, Mondays, Tuesdays, Thursdays and Fridays of each week. Each class was

in session for one hour. The subject matter taught was the same as in the evening schools of the city, except the advanced class was prepared for citizenship.

The company cooperated in every respect to make these classes attractive and successful. It was at the suggestion of one of the members of the firm that light refreshment was served to each student after work before he started his class work.

Only one pupil of the enrolment left the company's employ during the school period, and as she returned a few weeks after leaving, the classes maintained an average of 99.5 per cent of attendance in their departments, which showed an increase of 33 per cent over an equal number who did not attend the classes. Two men and three girls were singled out and without their knowing it, the foremen's report showed that their efficiency was increased from 25 per cent to 31 per cent as compared with their work prior to attending evening classes.

It is of no little satisfaction that we can make this statement that only two of the original pupils have left the company's employ since the classes were started and that those who have attended classes, have become the most loyal members of the working force in their respective departments.

The Shapiro Factory, Syracuse (employing mostly women):

We value our factory class last year very beneficial to both the factory and the employees. It raised the general intelligence of all the group, and was a socializing influence for good.

Crouse-Hinds, Syracuse:

The factory class is a great thing. The men are anxious to learn and are already asking when the school will open. Many studied from their children's books during the summer. Most of the men who could not write their names last year are now able to check up their own time. Plainly noticeable that the men respond to orders more quickly because they understand better.

Note: This factory was so well pleased with the results of the factory classes that they presented each teacher a check for \$25 at the close of the term.

Smith-Premier Typewriter Co., Syracuse:

The value of the factory class to the factory is that it saves time by making it easier to give orders.

Church and Dwight, Syracuse:

The factory class experiment is still too new to draw any definite conclusions. Would not say the factory class was any marked advantage to the factory, but there is no question that it was a decided help to the employees, and any movement that benefits the people in a community has a good effect on the industry of that community. We want our factory classes again this winter, because we believe that ultimately it will prove a good investment for the factory.

Onondaga Pottery Company, Syracuse:

We are thoroughly satisfied with the school and in a reasonable length of time it will do good. This company believes sufficiently in the value of the factory schools to be willing to give up space, light and heat and any other necessities for the class, also our time. It is the only way of teaching men.

On June 20, 1918, Seidenberg and Company, sent the following:

We write to thank you for the keen interest you have taken in people of foreign birth, who are in the employ of our firm, and your patriotic endeavor to have them taught to read and write English. The class has made splendid progress. All are anxious to learn, are fond of their teacher, Miss Appelt, and we consider ourselves well rewarded for the time and space we have given to the class.

United States Rubber Co., New Haven, Conn.:

Our classes are held in the various factories during working hours. The classes meet twice a week in the majority of cases, although in others they meet from three to five times each week. A day worker's time goes on in the factory, an hour's work in the Americanization school being equivalent to an hour's work in the shop. The piece workers are paid a minimum of 15 cents an hour. It is conceded by foremen generally, that the shop spirit is better, and that the number of errors in various departments, due to the lack of knowledge of English, has been reduced to a great extent by the direct method of handling these problems in classes.

The teachers are obtained in almost every case from the local board of education, and paid by them. Cooperation with and supervision by the public school authorities is strongly urged. We feel that the best results are obtained only when the public character of the education is encouraged.

The Pfister and Vogel Leather Company of Milwaukee, reported, August 1, 1919:

We gave six hundred of our employees a ten weeks' course in speaking, reading, writing and arithmetic in the English language, and kept away from the word "Americanization and Citizenship." We gave them full time during school hours, which was from 8 o'clock till 12 o'clock five days a week. Classes were of one hour duration. A separate check was given the man for time put in this school, from their regular check, so that there would be no confusion.

The A. B. Kirschbaum Company of Philadelphia:

Our piece workers are allowed fifty cents per hour while in attendance and our week workers' time is not deducted while they are in attendance.

The Wisconsin Bridge and Iron Company, of Milwaukee:

Some of the manufacturers are paying the men in their employ who need instruction in English for attending these classes. The basis of payment being one hour's pay at employees regular shop rate for every two hours spent in the class.

The Joseph & Feiss Co. of Cleveland, wrote on August 1, 1919:

It is now some years since we established classes for the teaching of English and citizenship. We have made the learning of English and attendance at classes compulsory, announcing that advancements took directly into consideration the speaking of English. At the same time, we started and have since continued a citizenship campaign. We have for the same length of time given preference in employment to those who speak English, employing no one who did not speak English well enough to pass certain tests, without a distinct understanding that his employment was conditional upon attendance at classes.

In Chicago, where there are 150 factory classes a week and a waiting list of 155 industries ready to start¹ there is enthusiastic approval of them. The superintendent of one of the International Harvester plants said:

Some of our people (in factory classes) are doubling their output.

Another Chicago manager said:

Our dream is that Americanization will banish foreign language foremen and interpreter in our employment office, two great barriers between us and our men. Only think what it means when I can make an announcement to them myself.

Another said:

It means a closer relation all along the line. Closer relation in our factory will result in better feelings, just as closer relations in our community life will result in better citizenship.

In Detroit, Mr Ford's plant has been having successful classes for some time. They report from there:

Accidents in this plant have decreased 54 per cent since employees have been able to read factory notices and instructions.

¹ See Everybodys, July 1919. An article by Grace Humphrey.

What should be said of a world-leading democracy wherein 10 per cent of the adult population can not read the laws which they are presumed to know?

What should be said of a democracy which sends an army to preach democracy wherein there was drafted out of the first 2,000,000 men a total of 200,000 men who could not read their orders or understand them when delivered, or read the letters sent them from home?

What should be said of a democracy which calls upon its citizens to consider the wisdom of forming a league of nations, of passing judgment upon a code which will insure the freedom of the seas, or of sacrificing the daily stint of wheat and meat for the benefit of the Rumanians or the Jugo-Slavs, when 18 per cent of the coming citizens of that democracy do not go to school?

What should be said of a democracy in which one of its sovereign states expends a grand total of \$6 per year per child for sustaining its public-school system?

What should be said of a democracy which is challenged by the world to prove the superiority of its system of government over those discarded, and yet is compelled to reach many millions of its people through papers printed in some foreign language?

What should be said of a democracy which expends in a year twice as much for chewing gum as for schoolbooks, more for automobiles than for all primary and secondary education, and in which the average teacher's salary is less than that of the average day laborer?

What should be said of a democracy which permits tens of thousands of its native-born children to be taught American history in a foreign language — the Declaration of Independence and Lincoln's Gettysburg speech in German and other tongues?

What should be said of a democracy which permits men and women to work in masses where they seldom or never hear a word of English spoken?

Yet, this is all true of the United States of America.

—Franklin K. Lane, Secretary of the Interior
Annual Report, 1918